PRACTICE GUIDE FOR DECONTAMINATING AIRCRAFT

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Flight Standards Service
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SUBJECT: PRACTICE GUIDE FOR DECONTAMINATING AIRCRAFT

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1. PURPOSE.

This publication is a guide to be used by groups or emergency readiness teams in the civil aviation industry for organizing and conducting practice exercises in aircraft decontamination.

2. REFERENCE.

It is recommended that this guide be used in conjunction with the FAA publication, "Radiological Protection and Decontamination of Civil Aircraft," Flight Standards Service (November 1962), for sale by Superintendent of Documents, U. S. Government Printing Office, Washington, D.C. 20402 (price $.65). This publication offers additional information to be used under actual conditions.

3. HOW TO OBTAIN ADDITIONAL COPIES.

Additional copies of this guide can be obtained free of charge by requesting AC 20-48 from:

Federal Aviation Agency
Printing Branch, HQ-438
Washington, D.C. 20553

4. BACKGROUND.

The information in this publication is the result of extensive testing in actual aircraft decontamination exercise operations to determine practical methods and procedures. During the tests, inadequate techniques were eliminated and only the effective and practical exercise procedures were selected for inclusion. The contents of this guide originated in the FAA Central Region Defense Readiness Office and were reviewed by the Atomic Energy Commission for technical and procedural accuracy.

5. USE OF PUBLICATION.

While it is impossible to write a set of procedures that will suit all emergency conditions, this guide includes the fundamental processes for the decontamination of aircraft exposed to radiation (fallout). It is recommended that the basic principles be mastered before attempting advanced and complex situations. Every effort was made to keep the procedures simple, yet practical and effective. The procedures contained in this publication may require modification in the case of actual fallout, since specific procedures would not be suited to all situations. An active and interested recovery team should be able to complete a successful exercise by following the steps outlined in Chapters 1 and 2. These chapters are to be used by the team group leaders as a checklist to avoid omissions or inappropriate sequence of operations. Chapter 3 offers suggestions for guiding the team in evaluating a completed practice exercise. Test exercises revealed that working practice groups who conducted three or four of these exercises became

adept in detecting their errors and were capable of making the necessary corrections to improve their methods or techniques for future actions. Appendix I provides information on the working equipment required and suggests methods for substitutions if necessary.

6. EXPERIENCE.

While it is desirable for all participants in one of these exercises to have some prior basic training in radiation, this cannot be expected in all cases. However, since the more technical aspects of the work involve a knowledge of radiation, the use of radiation instruments, calculating dosages, stay times, etc., it will be necessary to have at least one person in the group qualified to direct the monitoring operations. If such a person is not available within the group, he may be recruited elsewhere. There are qualified people in each agency listed in Appendix I as sources where radiation detection instruments may be borrowed. Your local Civil Defense Director will be able to recommend a qualified person, either to act as your monitoring team leader, or to instruct your own team leader sufficiently to qualify him for the job.

7. PARTICIPANTS.

This manual is prepared primarily for general aviation personnel; however, it may be of use to other groups, such as the civil air carriers, in developing their own techniques and methods for decontamination of large aircraft. Both men and women are encouraged to participate — pilots, mechanics, clerks, airport employees, etc., organized groups such as CAP Squadrons, local flying clubs, flying farmer units, fixed-base operators, and maintenance and repair stations. In fact, any group or organization operating an aircraft should complete this training.

8. PROFICIENCY

Decontamination work is comparatively new at this time and very few people have acquired proficiency; however, it can be self-taught. It is assumed that you will make mistakes during the initial exercises, but this is normal. You will learn by doing. A lively, serious "critique" period after each exercise is the key to improvement in each successive exercise. SPEED IS NOT IMPORTANT during training exercises in learning decontamination work. Your PRIMARY concern is (a) to learn how to do the job with a MINIMUM EXPOSURE of personnel to radiation, and (b) to remove as much of the contamination matter as possible from the aircraft. In fact, most errors are the result of trying to hurry through these procedures. The instructions in the following chapters will be most helpful in performing your practice exercise if taken in the order or sequence given.

C. W. WALKER,
Director
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ACKNOWLEDGEMENT

We wish to thank the many people who so willingly gave their time and energy to the work of field testing the procedures necessary for the development of this guide. We are also grateful to numerous individuals whose advice and suggestions were most helpful.

Although space will not permit a complete list of the individuals involved, the following is a list of organizations which either participated as an entire unit or were represented by some of their members:

9502nd Air Force Reserve Recovery Squadron at Rockford, Illinois.
Rockford, Illinois, C.A.P.
Evanston, Illinois, Civil Defense Office.
Fort Sheridan, Illinois, Defense Readiness Staff.
9536th AFRR Squadron at Des Moines, Iowa.
9547th AFRR Squadron at St. Louis, Missouri.
Rockford, Illinois, Civil Defense Office.
Greater Rockford Airport Management and Staff.
Illinois Wing Headquarters, C.A.P.
Missouri Wing Headquarters, C.A.P.
Headquarters 8581st AFRR Group at Kansas City, Missouri.
9544th AFRR Squadron at Kansas City, Missouri.
9543rd AFRR Squadron at Kansas City, Missouri.
FAA Tower and FSS Personnel at Rockford, Illinois.

TABLE OF CONTENTS

Chapter I. HOW TO PLAN AND PREPARE AN EXERCISE

Chapter II. HOW TO CONDUCT THE EXERCISE

PHASE I

PHASE II

PHASE III

TABLE OF CONTENTS—*Continued*

PHASE IV

Chapter III. CRITIQUE OF THE EXERCISE